

NEWS.

M. FR. GAY, of the University of Montpellier, a well-known student of the green algæ, died recently at the age of 40 years.

PASTOR CHRISTIAN KAURIN, of Sande Jarlsberg, Norway, a well-known student of Scandinavian bryology, died on May 25, 1898, at the age of 66.

PROFESSOR T. CARUEL, the eminent professor of botany and director of the botanic garden of Florence, died recently after a long and painful illness.

THE FRENCH ACADEMY of Science has awarded the Desmazières prize to our colleague, Professor J. B. DeToni, of the University of Padua, for his monumental work, the *Sylloge Algarum*.

AT THE ANNUAL meeting of the Royal Society (London) on Wednesday, November 30, a "Royal Medal" was awarded to Mr. Walter Gardiner in recognition of his discovery of the continuity of protoplasm.

AXEL BLYTT, professor of botany in the University of Christiania, died on July 18, 1898, at the age of 54 years. Since his death Professor Dr. N. Wille has been made director of the museum and herbarium of the University.

THE CANADIAN government has appropriated £1400 for the establishment of a floating biological station in the Gulf of St. Lawrence. It is hoped that the work will be begun early in the present year, on the south shore of Prince Edward's island. The station will be moved annually. Among the directors we note the name of Dr. D. P. Penhallow, of McGill University.

BRYOLOGISTS will be gratified to learn that the wish expressed in our review of M. Renauld's *Prodrome Flore bryologique de Madagascar* for illustrations of the new species described is to be gratified. MM. Renauld and Cardot are engaged to publish the mosses in the great work of M. Grandidier on Madagascar. Therein all the new species described in the *Prodrome* and many others will be figured on superb quarto plates. The first fascicle containing thirty-two plates has just appeared, to be followed by three and perhaps four others.

M. MICHEL GANDOGER, the well-known author of the *Flora Europæ*, an octavo work of 27 volumes published at Paris 1832-1893, is about to dispose of the herbarium upon which this work was based. Where possible he will divide each specimen into two parts. One set of these is to be presented to

the Museum at Paris; the other set will be sold. M. Gandoger has come to this decision in order to ensure the preservation of this valuable collection. In case an accident should befall one-half of it, the other will be likely to remain intact. His herbarium now contains 260,000 specimens, including a complete flora of Europe, and a considerable number of specimens of Africa, Asia, etc. All are in a good state of preservation and are poisoned either with corrosive sublimate or arsenate of sodium. We should be glad to know that some of our own larger herbaria had secured this important set of specimens. It would be particularly valuable in determining the identity of American with European forms.

AT THE MEETING of the Academy of Science of St. Louis on the evening of December 5, 1898, Mr. H. von Schrenk presented by title a paper "On the mode of dissemination of *Usnea barbata*;" and Professor L. H. Pammel presented by title a paper on "The histology of the caryopsis and endosperm of some grasses."

Dr. Theo. Kodis presented the results of some experiments on overcooling animal and vegetable tissues, in which it was shown that, as water may, under favorable conditions, be cooled to some distance below zero, Centigrade, without freezing—the temperature immediately rising to the freezing point the moment that freezing begins, and remaining there until the water is entirely solidified, then beginning once more to drop—so, when animal and vegetable tissues are experimented on, they may be cooled to a temperature decidedly lower than the freezing point, under favorable conditions, before freezing begins, but that, when it begins, the temperature at once rises to the freezing point (which is always somewhat lower than that of pure water), remaining there until the process of freezing is complete, when it once more begins to fall. The speaker gave a short account of the current theories as to the mechanical constitution of protoplasm, and discussed the bearing on them of the phenomena when the solidification of overcooled tissues began.—WM. TRELEASE.